



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,614	11/09/2001	Masaki Shimada	02860.0695	5939

7590 04/21/2004

Finnegan, Henderson, Farabow,
Garrett & Dunner, L.L.P.
1300 I Street, N.W.
Washington, DC 20005-3315

EXAMINER

DANG, KHANH NMN

ART UNIT	PAPER NUMBER
----------	--------------

2111

DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/986,614

Applicant(s)

SHIMADA ET AL.

Examiner

Khanh Dang

Art Unit

2111

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

Figures 7 and 8 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: In the "Brief Description of the Drawings," Figures 7 and 8 must be referred to as Prior Art.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 2-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, line 1, "The device" should be changed to -- The device for storing data --, since there is a plurality of devices recited in claim 1.

In claims 3-8, line 1, same correction set forth above regarding to claim 1 should also be made to claims 3-8.

In claim 8, line 6, page 42 to line 2, page 43, the phrase, "only when said power controller detects that said power-supply section is activated" appears to be incorrect. As understood, the power supplied from the external device through the interface connecting port, is further supplied to the peripheral device through the second interface connecting port, only when the controller detects that the power supply section is deactivated.

In claim 9, line 1, page 44, "said device" lacks clear antecedent basis, since a plurality of devices are recited in the claim. It is suggested that "said device" be changed to – said device for storing data --.

In claim 9, line 1, page 44, the word "includes" should be changed to – include --.

In claim 9, line 7, page 44, "said device" lacks clear antecedent basis, since a plurality of devices are recited in the claim. It is suggested that "said device" be changed to – said device for storing data --.

With regard to claim 10, the phrase, "passes through said interfacing circuit as it is" is unclear and cannot be fully ascertained.

With regard to claims 10-14, line 1, "The device" should be changed to – The device for storing data --, since there is a plurality of devices recited in claim 9.

With regard to claim 11, line 3, page 44, "said device" should be changed to – said device for storing data --. In page 45, line 1, "said power supply unit" lacks antecedent basis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

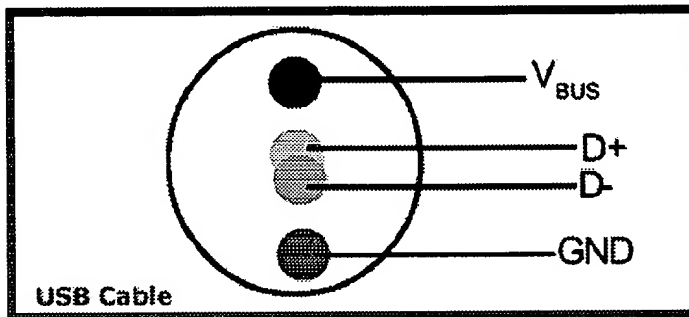
Claims 1, 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Hannah.

At the outset, it is noted that similar claims will be grouped together to avoid repetition.

As broadly drafted, these claims do not define any structure that differs from Hannah.

With regard to claim 1, Hannah discloses a device for storing data (it is clear that the VCR 50, for example, can store data), comprising: an interfacing circuit (USB interface) that includes a data communication path through which the data can be bilaterally communicated between the device (50) and an external device (host device 10 or upstream host), which is coupled to the device (50) with an interface cable (it is inherent that a USB cable is need to provide USB connections between devices or nodes), and a power-supplying path through which a power current can be bilaterally

supplied between the device (50) and the external device (host device 10/ upstream host or camera 54), wherein the interface cable also includes the data communication path and the power-supplying path (the USB devices of Hannah must be in full compliance with the USB specification; wherein the USB cable transfers both power and data. A typical USB cable is shown below:



; wherein Vbus is 5V at the source and a twisted wire pair for data); a data-storing unit (the storage medium of VCR 50) to store the data sent from the interfacing circuit; and a plurality of interface connecting ports (privileged upstream port or host port and hub port 56) serving as input/output terminals of the interfacing circuit, wherein the interface cable can be connected to one of the interface connecting ports.

With regard to claim 3, Hannah discloses a device for storing data (it is clear that VCR 50 can both store and play data), comprising: an interfacing circuit (USB interface) that includes a data communication path through which said data can be bilaterally communicated between said device (50) and an external device (host device 10/ upstream host or camera 54), which is coupled to said device (50) with a first interface cable (it is inherent that a USB cable is needed to connect the device (50) to one of the

Art Unit: 2111

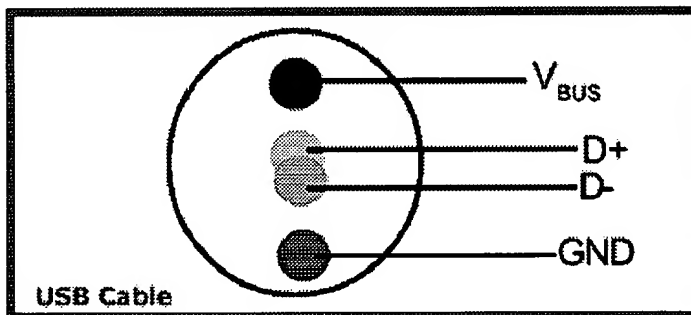
external devices), and a power-supplying path through which a power current can be bilaterally supplied between said device and said external device, wherein said first interface cable also includes said data communication path and said power-supplying path (the USB devices of Hannah must be in full compliance with the USB specification; wherein the USB cable transfers both power and data. See the diagram above showing a typical USB cable); a data-storing unit (storage medium of VCR 50) to store said data sent from said interfacing circuit; a plurality of interface connecting ports (privileged upstream port or host port and hub port 56) serving as input/output terminals of said interfacing circuit, wherein said first interface cable can be connected to a first interface connecting port being one of said interface connecting ports; and a power-supply section (it is clearly inherent that the VCR includes a power supply section) to supply a first power current for driving said data-storing unit.

With regard to claim 4, a peripheral device (54, for example) can be also coupled to said device through a second interface connecting port being another one of said interface connecting ports with a second interface cable (another USB cable from 50 to 54).

With regard to claim 5, a second power current (appearing at the hub port 56), being a part of said first power current outputted by said power-supply section, is also supplied to said peripheral device (54, for example) through said power-supplying path included in said second interface cable (see diagram of a typical USB cable above) connected to said second interface connecting port.

Claims 1, 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by JA 200214954 (954).

With regard to claim 1, 954 discloses a device for storing data (30), comprising: an interfacing circuit (USB interface) that includes a data communication path through which the data can be bilaterally communicated between the device (30) and an external device (20), which is coupled to the device (30) with an interface cable (it is inherent that a USB cable is need to provide USB connections between devices or nodes), and a power-supplying path through which a power current can be bilaterally supplied between the device (30) and the external device (20), wherein the interface cable also includes the data communication path and the power-supplying path (the USB devices of 954 must be in full compliance with the USB specification; wherein the USB cable transfers both power and data. A typical USB cable is shown below:



; wherein V_{bus} is 5V at the source and a twisted wire pair for data); a data-storing unit (FDD 21) to store the data sent from the interfacing circuit; and a plurality of interface connecting ports (ports for external device 20, keyboard 3 and mouse 4)

serving as input/output terminals of the interfacing circuit, wherein the interface cable can be connected to one of the interface connecting ports.

With regard to claim 3, 954 discloses a device for storing data (30), comprising: an interfacing circuit (USB interface) that includes a data communication path through which said data can be bilaterally communicated between said device (30) and an external device (20), which is coupled to said device (30) with a first interface cable (it is inherent that a USB cable is needed to connect the device (50) to one of the external devices), and a power-supplying path through which a power current can be bilaterally supplied between said device and said external device, wherein said first interface cable also includes said data communication path and said power-supplying path (the USB devices of 954 must be in full compliance with the USB specification; wherein the USB cable transfers both power and data. See the diagram above showing a typical USB cable); a data-storing unit (FDD 21) to store said data sent from said interfacing circuit; a plurality of interface connecting ports (ports for external device, ports for keyboard 3 and mouse 4) serving as input/output terminals of said interfacing circuit, wherein said first interface cable can be connected to a first interface connecting port being one of said interface connecting ports; and a power-supply section (it is clearly inherent that the housing 30 includes a power supply section) to supply a first power current for driving said data-storing unit (FDD 21) and other units included in the storage device 30.

With regard to claim 4, a peripheral device (3 or 4, for example) can be also coupled to said device through a second interface connecting port (another USB port)

being another one of said interface connecting ports with a second interface cable (another USB cable from 30 to 3 or 4).

With regard to claim 5, a second power current (appearing at the hub port 56), being a part of said first power current outputted by said power-supply section, is also supplied to said peripheral device (3 or 4, for example) through said power-supplying path included in said second interface cable (see diagram of a typical USB cable above) connected to said second interface connecting port.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hannah.

Hannah, as explained above, discloses the claimed invention including the use of a storage medium for the VCR 50. Hannah does not disclose the use of a MO disk drive as a storage medium. However, the use of MO hard drive (HD) is old and well-known as evidenced by digital video recorders or digital VCRs employing MO HD disclosed by at least Matsumi et al. or Kawai et al. cited below as relevant art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use MO

HD as a storage medium, since the Examiner takes Official Notice that the use of MO HD in a digital VCR is old and well-known; and providing Hannah with a MO HD for cost advantage and large capacity only involves ordinary skill in the art. If Applicants choose to properly challenge the Official Notice, supportive document(s) will be provided upon request.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hannah.

Hannah, as explained above, discloses the claimed. Hannah does not disclose the use of "a power controller to control an amount of current to be supplied to the peripheral device." However, the use of a "power controller to control an amount of current" is old and well-known in the art as evidenced from a typical current limiting circuit. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a power controller in Hannah, since the Examiner takes Official Notice that the use a power controller for limiting current, for example, is old and well-known; and providing Hannah with a power control for over-current prevention and protecting the peripheral device from damage, only involves ordinary skill in the art. If Applicants choose to properly challenge the Official Notice, supportive document(s) will be provided upon request.

Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over 954.

054, as explained above, discloses the claimed invention including the use of a storage medium FDD 21. 954 does not disclose the use of a MO disk drive as a storage medium. However, the use of MO hard drive (HD) is old and well-known as evidenced by the commercial IDE MO HD. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use MO HD as a storage medium, since the Examiner takes Official Notice that the use of MO HD as an storage medium is old and well-known; and providing 954 with a MO HD for cost advantage and large capacity only involves ordinary skill in the art. If Applicants choose to properly challenge the Official Notice, supportive document(s) will be provided upon request.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over 854.

954, as explained above, discloses the claimed. 954 does not disclose the use of "a power controller to control an amount of current to be supplied to the peripheral device." However, the use of a "power controller to control an amount of current" is old and well-known in the art as evidenced from a typical current limiting circuit. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a power controller in 954, since the Examiner takes Official Notice that the use a power controller for limiting current, for example, is old and well-known; and providing 954 with a power control for over-current prevention and protecting the peripheral device from damage, only involves ordinary skill in the art. If Applicants choose to properly challenge the Official Notice, supportive document(s) will be provided upon request.

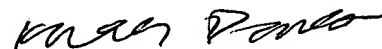
Allowable Subject Matter

Claim 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 9-14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

U.S. Patent Nos. 6,678,464 to Kawai et al., 6,711,343 to Matsumi et al., 6,691,187 to Schwerin, 6,289,397 to Tsuyguchi et al., and US 2002/0114613 A1 to Thai are cited as relevant art.

Any inquiry concerning this communication should be directed to Khanh Dang at telephone number 703-308-0211.



Khanh Dang
Primary Examiner